

WHAT IS CLAIMED IS:

1. A System comprising:
an RF ID unit; and
an RF ID reader, wherein the RF ID unit is adapted to transmit a stored ID to the RF ID reader, the RF ID unit adapted to encrypt a password input from a user interface to form an encrypted message, the RF ID unit adapted to transmit the encrypted message to the RF ID reader, the RF ID reader adapted to use the ID to obtain a key to decrypt the encrypted message with the key and to authenticate the RF ID unit.
2. The system of claim 1, wherein the user interface is on the RF ID unit.
3. The system of claim 1, wherein user interface is on another device that is attachable to the RF ID unit.
4. The system of Claim 1 wherein the RF ID reader transmits additional data to the RF ID unit, the transmitted message including an encrypted password and the additional information.
5. The system of Claim 4 wherein the additional information is a time-stamp.
6. The system of Claim 1 wherein the RF ID reader and the RF ID unit use the same key.
7. The system of Claim 1 wherein the RF ID reader and the RF ID unit use a different key.

8. The system of Claim 7 wherein the RF ID reader and the RF ID unit encrypt and decrypt using a public/private encryption algorithm.

9. The system of Claim 1 wherein the ID is used to look up key and password.

10. The system of Claim 1 wherein the RF reader is associated with an external network, the RF ID reader sending the ID to the external network to obtain the key, and the RF ID reader sending the encrypted message to the external network.

11. The system of Claim 1 wherein the system is used to authenticate a user.

12. The system of Claim 1 wherein the system is used to provide a secure passage of a user within a building.

13. The system of Claim 1 wherein the system is used for authentication.

14. The system of Claim 13 wherein the system is used for commercial transaction authentication.

15. The system of Claim 1 wherein the user interface is a keypad.

16. A method comprising:
transmitting an ID from an RF ID unit to an RF-ID reader;
receiving a password from a user interface;
encrypting the password to form an encrypted message; and
transmitting the encrypted message from the RF ID unit to an RF-ID reader.

17. The method of claim 16 wherein the user interface is on the RF ID card.
18. The method of claim 16 wherein the user interface is on another device attachable to the RF ID card.
19. The method of Claim 16 wherein additional data is provided from the RF ID reader to the RF ID unit, the RF ID unit encrypting the password along with the additional data to form the encrypted message.
20. The method of Claim 16 wherein the additional data is a time-stamp.
21. The method of Claim 16, further comprising decrypting the encrypted message.
22. The method of Claim 16 wherein the encryption method is a public/private encryption method.
23. The method of Claim 16 wherein the encryption is a hidden key encryption system.
24. The method of Claim 16 wherein the user interface is a keypad.
25. An RF ID unit with a user interface, the RF ID unit adapted to transmit a stored ID to a RF ID reader, the RF ID unit adapted to encrypt a password input from the user interface to form an encrypted message, the RF ID unit adapted to transmit the encrypted message to a RF ID reader.

26. The RF ID unit of Claim 25 wherein the RF ID unit receives additional data from the RF ID reader, the additional data being encrypted along with the password to form the encrypted message.
27. The RF ID unit of Claim 27 wherein the additional data is a time-stamp.
28. The RF ID unit of Claim 25 wherein the encryption is a public-key/private-key encryption system
29. The system of Claim 25 wherein the encryption is a hidden key encryption system.
30. The system of Claim 25 wherein the user interface is a keypad.